Impression Publisher, MacFS, LaserDirect HiRes, Impression Style, JPEG & PhotoCD loaders, Canon BJC-600 colour printer, Impression borders disc, Compression, Canon BJ-200 printer, Equasor, ColourCard Gold, Canon BJ-230 printer, ArtWorks, Scanlight 256, Pioneer 604X CD player, ClipArt CD, Eagle, AudioWorks, ScanLight Video, MidiMax, WordWorks, ArtWorks CD, ScanLight Professional, TurboDrivers, Impression Publisher, MacFS, Laser-Direct HiRes, Impression Style, JPEG & PhotoCD loaders, Canon BIC-600 colour printer, Impression borders disc, Compression, Canon BJ-200 printer, Equasor, ColourCard Gold, Canon BJ-230 printer, ArtWorks, ScanLight 256, Pioneer 604X CD player, ClipArt CD, Eagle, Audio-Works, ScanLight Video, MidiMax, WordWorks, ArtWorks CD, ScanLight Professional, TurboDrivers, Impression Publisher, MacFS, LaserDirect HiRes, Impression Style, JPEG & PhotoCD loaders, Canon BJC-600 colour printer, Impression borders disc, Compression, Canon BJ-200 printer, Equasor, ColourCard Gold, Canon BJ-230 printer, ArtWorks, ScanLight 256, Pioneer 604X CD player, ClipArt CD, Eagle, AudioWorks, ScanLight Video, MidiMax, WordWorks, ArtWorks CD, ScanLight Professional, Turbo-Drivers, Impression Publisher, MacFS, LaserDirect HiRes, Impression Style, JPEG & PhotoCD loaders, Canon BJC-600 colour printer, Impression borders disc, Compression, Canon BJ-200 printer, Equasor, ColourCard Gold, Canon BJ-230 printer, ArtWorks, ScanLight 256, Pioneer 604X CD player, ClipArt CD, Eagle, AudioWorks, ScanLight Video, MidiMax, WordWorks, ArtWorks CD, ScanLight Professional, TurboDrivers, Impression Publisher, MacFS, LaserDirect HiRes, Impression Style, JPEG & PhotoCD loaders, Canon BJC-600 colour printer, Impression borders disc, Compression, Canon BJ-200 printer, Equasor, ColourCard Gold, Canon BJ-230 printer, ArtWorks, Scanlight 256, Pioneer 604X CD player, ClipArt CD, Eagle, AudioWorks, ScanLight Video, MidiMax, WordWorks, ArtWorks CD, ScanLight Professional, TurboDrivers, Impression Publisher, MacFS, LaserDirect HiRes, Impression Style, JPEG & PhotoCD loaders, Canon BJC-

Archimedean

Issue Nº10

600 colour printer, Impression borders disc, Compression, Canon BJ-200 printer, Equasor, ColourCard Gold, Canon BJ-230 printer, ArtWorks, Scanlight 256, Pioneer 604X CD player, ClipArt CD, Eagle, Audio-Works, Scanlight Video, MidiMax, WordWorks, ArtWorks CD, ScanLight Professional, TurboDrivers, Impression Publisher, MacFS, LaserDirect HiRes, Impression Style, JPEG & PhotoCD loaders, Canon BJC-600 colour printer, Impression borders disc, Compression, Canon BJ-200 printer, Equasor, ColourCard Gold, Canon BJ-230 printer, ArtWorks, Scanlight 256, Pioneer 604X CD player, ClipArt CD, Eagle, Audio-Works, ScanLight Video, MidiMax, WordWorks, ArtWorks CD, Scan-Light Professional, TurboDrivers.

Impression Publisher



COMMENT

The Acorn Risc PC is finally launched.

2 NEWS

New magazine for Acorn DTP users, Email hotline, Wild Vision get technical, Musketeer software bundle, bargain offers, Midi Max, Graphics tablets, price reductions on colour printers, diary dates.

5 FEATURES

Lark 16-bit sound card
Canon 800dpi A4 colour scanner
ArtWorks
Impression Publisher Plus
Risc PC compatibility
Formulix
Movie Magic MPEG card
TV Tuner
TurboDrivers and network spoolers

14 HINTS & TIPS

Creating cut-outs in ArtWorks.

15 PRODUCTS

A full list of all our products with prices and latest version numbers.

Production

This issue of The Archimedean was created entirely in Impression Publisher, using an Acorn Risc PC600 with 10Mb RAM and a 200Mb hard disc. All proofing and layout checks were output on a BJC-600. Final negative film was created from PostScript output files through a Linotronic 300 imagesetter.

© 1994 Computer Concepts Ltd

The Archimedean is issued free of charge to registered owners of Computer Concepts' Archimedes products.



Computer Concepts Ltd

Gaddesden Place, Hemel Hempstead, Herts. HP2 6EX Tel 01442 63933 Fax 01442 231632 Email: Info@CConcepts.co.uk

The Risc PC is finally with us, so what does it mean for Computer Concepts?

he new Risc PCs from Acorn remove the two most serious factors limiting previous
Acorn computers from competing in the world of professional desk top publishing, namely RAM restrictions and video quality. While it is still perfectly possible to create very complex DTP documents on the old machines, there is no doubt that it is pushing them to the limits.

Of course Impression Publisher can handle 24 bit colour even on older machines, and add-ons like Colour-Card provide a half-way house towards the screen capabilities of the new machines. So you *can* create magazines like the Archimedean on older Acorn hardware, but there's no doubt that it's even easier and quicker using a Risc PC.

No computer is perfect. There are some annoying omissions. The operating system has had only a superficial update, when there are a dozen or more, often relatively minor, changes that could have been made that would have significantly improved the usability of the desktop. Things like long filenames. To implement this feature 'cleanly' would require major work. But there are other ways to implement this feature, which may be more of a 'bodge', but that in practice would be perfectly acceptable, and backwards compatible.

Previews appearing in the press of the next version of Windows reveal that it does provide long filenames, and does so on top of DOS, which shows it is perfectly feasible. Proportional scroll bars, solid window dragging, pop-up menus, an icon bar and anti-aliased fonts have all been seen on versions of Windows. OK, Acorn may have plans to improve Risc OS, and Windows 95 isn't around yet, but Acorn have to keep on the ball.

Overall the new computers are competitive with the alternatives around. To be merely competitive sounds a bit feeble, but in fact, given the rate of change in this industry, it is an amazing feat. Acorn still have an uphill struggle persuading new customers that the Acorn solution is best. However the plain fact is that for existing Acorn users there is now a machine that will truly stand up against the very best of the alternatives - Pentiums and PowerMacs. Using a RiscPC with our products, we can still impress the hell out of even the most die-hard Mac or PC user.

As far as compatibility is concerned there are few problems. Much of our older software and hardware was not fully compatible with the new machines. However we have created new versions, where needed, of all our key products. There is an article covering the compatibility issue in more detail later in this magazine.

Other new products covered in this issue include the new Formulix mathematical formula editor, the Lark 16-bit sound expansion card, the latest addition to the Impression range and the TV Tuner.

Finally, one of the most exciting developments is our Movie Magic MPEG board for the Risc PC. This has been designed in association with Online Media, who use similar technology in their Set Top Box.

All these and more can be seen on our stand at Acorn World - we hope to see you there; Wembley Exhibition Centre, Stand 110 and 112, October 28th-30st.

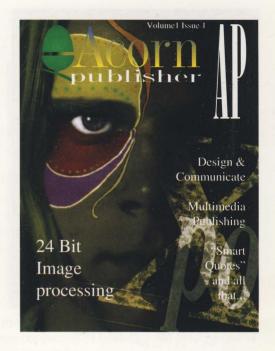
Spread the word

The increasing interest in DTP on Acorn computer systems has led to the launch of a new magazine. The aptly titled Acorn Publisher is a subscription only journal and is intended to provide information on all aspects of publishing on Archimedes and Risc PC platforms.

The stated aim of the publishers is to cater for everyone, be they absolute beginners or seasoned professionals. Future issues are expected to include news, features and reviews, as well as practical, on-going workshops concentrating on graphic design and printing technology.

The magazine will be published by Akalat Publishing, six times a year and costs £24.95 for a full year's subscription in Britain, the Channel Islands, Northern Ireland and BFPO.

CC are not involved in the venture in any way, but it sounds interesting more details are available from Akalat Publishing, PO Box 231, Barton, Bedford, MK45 4HQ, Tel./Fax, 01582 881614.





Home shopping

Those with access to electronic mail (or Email) can now contact Computer Concepts directly for technical information and advice. Orders can be made via Email by anyone with a credit card, ensuring a swift response. (Please quote your credit card number and its expiry date.) There is no facility for upgrades via Email, but registered customers can request them to be sent via ordinary post.

/ If you wish to receive information, then use the address
'Info@CConcepts.co.uk'. A single word in the 'Subject' field will
provide the user with more specific information ie. versions lists new
versions and upgrades, hardware gives details of current hardware, and
software lists current software products.

Orders should be directed to 'Sales@CConcepts.co.uk' and technical support and queries should be sent to 'Support@CConcepts.co.uk'. Please note that upgrades are only available to registered owners of Computer Concepts and Wild Vision products and that existing customers should always quote their software serial number where relevant.

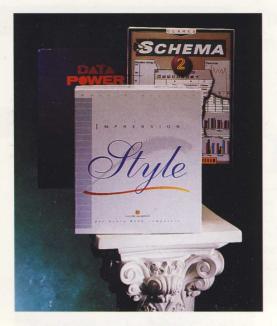
Wild Vision get technical

Following the link up between Computer Concepts and Wild Vision last year, Computer Concepts have now taken on board all the marketing and sales duties for their sister company.

This now means that Wild Vision are free to concentrate on new hardware projects without the hassle of managing the administration side of things. This in turn should speed up the development of any new designs and enable deadlines to be reached with increased accuracy.

Wild Vision will continue to give technical support to owners of Wild Vision products and they can be contacted at 15 Witney Way, Boldon Business Park, Boldon Colliery, Tyne & Wear, NE32 9PE. Tel. 0191 519 1455. Telephone support is offered between 12.00-4.30 pm Monday to Thursday and 12.00-2.00 pm on Friday.





Three for one

Computer Concepts, Clares and lota have got together to create a bundle of some of the best pieces of software for Acorn RISC computers in their class. The imaginatively titled Musketeer pack includes the latest versions of Impression Style, Schema 2 and Datapower, and is intended as a direct upgrade for Acorn Advance.

The normal price for the three software packages on their own would be £385 + VAT, but they can now be purchased for only £249 +VAT, a saving of over £150. Registered owners of Acorn Advance can buy the Musketeer pack for £199 + VAT, making it an ideal way to upgrade their system.

The Musketeer Pack will be on sale at the forthcoming Acorn World Show at Wembley, but can also be obtained directly from lota Software at lota Software Ltd, lota House, Wellington Court, Cambridge. CB1 1HZ. Tel. 01223 566789. Fax. 01223 566788.

Bargains galore

If you're stuck for space with your A3000, or need to add a genlock board to your computer, then now is the time to take advantage of two special deals.

The A3000 Expansion box can house up to three half-width, or two full-width expansion cards, vastly increasing the versatility of your computer. The box adheres to the MEMC data rate, making it ideal for expansion cards that require fast access across the podule bus, such as LaserDirect.

The Expansion box has been reduced in cost from £139 + VAT to only £99 + VAT whilst stocks last. It includes a 12V power

Genlock board are down from £249 + VAT to only £149 + VAT.

supply designed specifically for cards whose power requirements are not met by the A3000. Fitting instructions and a utility disc are included in the price.

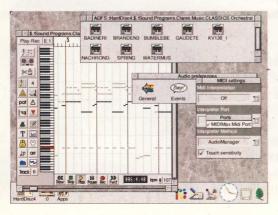
utility disc are included in the price.

Wild Vision's series of Chroma Genlock boards provide facilities for mixing computer output with any composite PAL video source. There are many uses for the cards including presentations and promotional videos. Computer

animation can be incorporated into live video opening up a whole world of possibilities. All versions of the Chroma



MIDIMax



MIDIMax is a single width MIDI expansion card, designed to provide a stand alone MIDI solution at a low price. It can be connected to a wide range of compatible equipment, including drum machines, keyboards, synthesizers and sequencers. The software is licensed from Acorn and can be used with all RISC OS applications such as Serenade and Rhapsody (see left).

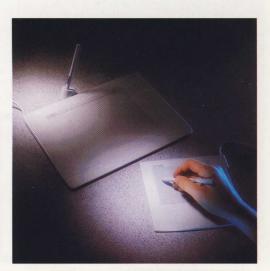
The card is fitted with the usual MIDI In, Out and Thru connectors, plus a second Out connector to simplify the connection of multiple interfaces. Full driver software is included and the complete bundle costs £69 (£88.12 inc. VAT & carriage).

Fine Art

Although ArtWorks is one of the easiest drawing packages to use, the mouse is by no means an ideal input-tool and can often stifle the artist's creative flow. Those who wish to draw more naturally can now do so using the newly launched ArtPad from Wacom.

The ArtPad is an A6 graphics tablet than plugs into the computer via the serial port, making it an ideal option for all types of Archimedes. The pad is completely pressure-sensitive which allows the user to treat it just like a traditional writing instrument.

Special pressure-sensitive drivers for the ArtPad and other Wacom tablets will be available shortly from Computer Concepts and allow them to be used with many packages such as Photodesk, DA Picture and Studio24. A new tool is also available for ArtWorks which allows freehand drawing with precise control of the line thickness.



Prices for the graphics tablets with drivers start at less than £200+VAT for the A6 ArtPad. Larger tablets are available – an A5 tablet costs £399+VAT and an A4 tablet £549+VAT. Special bundles consisting of Spacetech's Photodesk, the Eesox ArtWorks Pressure Tool and any one of the three tablets will also be available.

Cheaper colour

As from October 1st, the Canon BJC-600 is reduced by £80 to only £389 + £10 p&p + VAT. This means that full 24-bit colour printing is more affordable than ever. The BJC-600 is an A4 printer that connects to the computer via the standard parallel port. TurboDrivers are included in the deal to ensure optimum performance and quality.

Diary dates

Computer Concepts will be attending the following events so, as they say, book now to avoid disappointment.

14th-15th October Acorn Open Days with Minerva at the Rougemont Hotel, Queen Street, Exeter. Friday (10 - 7pm) is education and Saturday (10-4pm) consumer. Details from Minerva on 01392 410137.

22nd October Sharbrook Autumn Show in Taunton. 10 - 4 pm, open to everyone. Details on 01823 665001.

28th-30th October Acorn World Show. Stand 110 & 112, Wembley Exhibition Centre.

5th November Acorn Open day with Alsystems at The Windmill, Winchester Road, Four Marks, Alton, Hants. 10 - 4 pm open to everyone. More details from Alsystems on 01420 561111.

6th November Acorn Open Day at The Riverside Centre, The Quay, Newport, Isle of Wight. 10-4 pm.

Details on 01983 822209.

11th-12th November Acorn Open Day with LMR at 2 North parade, Norris Road, Sale, Cheshire, M33 3JS.

Times 3-8 pm on Friday, 10-pm on Saturday. For more details contact LMR on 0161 962 8872.

18th-19th November Arm Club Show with Mauden Sales at St Mary's Activity Centre, Gorge Road, Sedgeley, West Midlands.

10 - 4pm. More details from Mauden on 01384 833300.

20th November Acorn Open Day with Selective Computers at The Kegworth Hotel, Packington Hill, Kegworth,

Derbyshire. 10 - 5pm. Open to everyone. More details from Selective on 01332 690691.

Details are correct on 1st September 1994 but may be subject to change. Please check with organisers (numbers given).

Please let us know immediately if there is a mistake in your name/address on this issue, or if you have received duplicate copies of Archimedean. This will help us to speed up delivery and keep costs down.

hen Computer Concepts brought out the Colour Card Gold, they set a new standard in graphics capability and performance. Now they have done the same for another field of hardware: the recently launched Lark expansion card gives Acorn owners the opportunity to exploit high quality digital sound to an extent that matches, and in some cases exceeds that available on other platforms, and even professional systems.

When the Archimedes 300 series was first launched, its sound system was considered state of the art, offering 21kHz stereo sound. Whilst its sound system was fundamentally only 8 bit, a clever technique called 'logarithmic sampling' allowed it to achieve far better quality than its competitors.

As technology has progressed, however, this specification has fallen behind the leading edge. With the increasing demand for multimedia products, Computer Concepts realised that users required higher

| Set mid C | Set

quality, more flexibility and better functionality - perhaps most importantly the ability to record sound on their computers. In close association with Wild Vision, Computer Concepts developed four products to remedy this situation.

The first of these was the Eagle M2 multimedia expansion card. Offering

Sound Advice



16 BIT STEREO/AUDIO SYSTEM FOR ACORN RISC COMPUTERS

both sound and graphics capabilities, the features of this card were covered extensively in the last issue of the Archimedean.

AudioWorks is a fully fledged sample

editor that gives the user powerful tools with which to manipulate sound samples (see left).

Midi Max (see the news section) allows the Acorn owner access to MIDI at a previously unheard of level of performance and value.

The Lark

Finally, the Lark expansion card is aimed both at the audio and computer music enthusiast, and at those needing high quality digital sound for semi-professional and professional uses. It offers both 16 bit audio sampling and playback, as well as a full functioned MIDI port. Stereo line-

level input and output are provided as standard, so the card can be connected to a HiFi, external amplifier or tape recorder. The user may also connect headphones, a microphone and has the option to use the internal speaker for sound output as well.

The card is bundled with the Audio-Works sample manipulation package so the user can exploit the power of the card to the full.

Sound sampling

The Lark provides 14 sample rates from 5.5kHz to 48kHz allowing the user to perform 16-bit mono or stereo sound sampling at an unparalleled level of quality and versatility.

Sampling can be done either in the background with real time on-screen update of the waveform display as the sample is captured, or straight to a disk file. With the latter option, you may record a sample which is many times the size of memory.

Once the sampling has been performed, AudioWorks can be used both to perform simple edits (such as cutting out unwanted sections or altering the volume), or to add complex effects (see below).



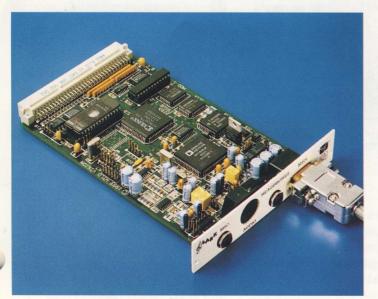
Recorded sounds are crystal clear and their quality is comparable to that of CD or DAT - indeed the sample rates (which play a great part in determining the fidelity of the sound) of both of these two recording media are also offered by the Lark.

... and playback too!

Whilst recording sound is obviously useful, the Lark would not be nearly such a valuable addition to an Acorn machine if it did not offer the ability to replay the sound at the quality at which it was recorded.

Although, using AudioWorks, samples can be played back through the internal 8 bit sound system, owners of the Lark can also exploit its high quality sound output system to play back up to 16 channels of professional-quality sound.

The difference in sound quality should be instantly apparent to most users. Techniques borrowed from the world of HiFi design were used to minimise the distortion and noise present on the sound output, and the higher sampling rates available



(again, up to 48kHz) and the true sixteen bit stereo sound system all add up to produce a quality of sound output that Acorn owners have never before experienced.

Software

AudioWorks provides a collection of tools and effects that can be used to edit and manipulate captured or imported sound samples. These range from simple operations such as cropping and

splicing different portions of sound, to complex effects such as ramping, pitch and amplitude bends and echo. It can simultaneously manipulate and play back as many samples as memory and hardware will allow. It even provides a real time spectrum analyser and oscilloscope, as well as control over the Lark's many sampling and playback options.

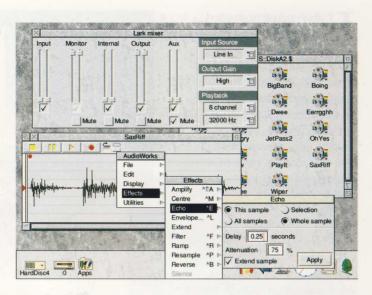


Those familiar with the world of computer controlled music cannot have failed to appreciate the impor-

tance of
MIDI to any
system. It is
a standard
system by
which
devices such
as synthesizers, drum
machines
and
sequencers
can be
controlled.

Thus the Lark's MIDI port provides the

ideal way of giving full control over any MIDI device attached to it. 'In', 'Out' and 'Thru' connectors are all provided. The card is fully Acorn compatible, so sequencer software



such as Clares' Serenade can be used both to capture MIDI data from a keyboard attached to the card, and also to replay edited tracks to instruments attached.

In addition, the Lark card can be controlled from a separate Midi keyboard, with any sound held in the computer's memory being used as the 'instrument'.

The ultimate in sound cards

The Lark is designed for use with all computers in Acorn's 32-bit range that are capable of taking a single width podule. You will, however, require an ARM 3 (or better) and at least 4MB of memory to use sound playback. The new, more powerful Risc PC range are better able to exploit the full functionality of the Lark, but the faster and more powerful your machine is, the more you will be able to take advantage of its flexible features.

For only £199 (£233.83 inc.VAT) you can transform your computer into a digital audio system offering facilities that would not be out of place in a modern studio. It is the only expansion card of its kind that provides both 16-bit recording and playback, as well as a full specification Midi port. AudioWorks is available on its own for £49 +VAT (£57.57 inc.) - it can be used as a stand-alone application, without extra hardware.

If you've just upgraded your computer with ColourCard Gold or perhaps you've just bought a new RiscPC, how are you going to make the most of all those extra colours?

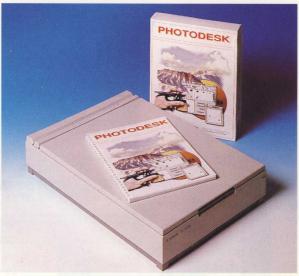
PhotoCD is one answer but you still require a CD-ROM drive and the time it takes to get a picture from film to disc can be prohibitive. An alternative answer is a colour scanner.

It is now possible to get an A4 scanner capable of producing 24-bit colour images at 800dpi resolution (and monochrome up to 1200 dpi) for a relatively low cost. Such a scanner is Canon's IX-4015 which has now been taken on by Computer Concepts to provide a high-end solution to professional users.

The Canon IX-4015 is fitted with a standard SCSI bus and will therefore connect to any Acorn RISC computer fitted with a suitable interface. Using the SCSI standard also means that the scanner is fast; a particularly important factor when deadlines have to be met with speed and efficiency.

Canon have designed the IX-4015 to be a true desktop scanner, with a compact footprint and relatively light weight.

The Canon IX-4015 is supplied with all necessary cables and software in order to get it up and running, although a SCSI card must already be fitted to the host machine. The package works on any Acorn RISC computer with RISC OS 3.1 although 4MBytes minimum is recommended. The hardware is covered by Canon's 12 month warranty.



Picture this ... Canon's 800dpi colour scanner with Photodesk

Rather than supply an upgraded colour version of the existing Scan-Light software, Computer Concepts have selected Photodesk – Spacetech's photo retouching package – as the best match for the Canon scanner.



Its ability to work in 16-bit and 24-bit colour modes also means that it is an ideal choice for use with other Computer Concepts products such as ColourCard Gold.

Recent reviews in the Acorn press suggest that Photodesk is one of the best picture manipulation packages available for Acorn RISC computers. For those who not seen Photodesk in operation, here are a few of its more important features.

- An airbrush, paintbrush, a magic wand and a useful set of drawing tools.
- Full 24-bit colour support. All images are held in memory as 24-bit colour data and any alterations are also carried out in the 24-bit domain.
- Virtual memory. Images of any size can be edited without the need for vast amounts of memory in the host computer.
- Complete Undo. Any number of mistakes can be backstepped, even to the starting point of alteration.
- Effects such as colouring, toning, masking which can be 'painted' on.
 - Special effects allow pictures to be manipulated in numerous ways. Examples include motion blur, cloning, smudge and smear.
 - Filters. Filters allow pictures to be processed in many ways including enhancing, contrast correction and histogram equalisation.
 - OLE with Impression making it easy to integrate and edit pictures within Impression.
- Compatible with the Wacom pressure sensitive tablets.

ScanLight Professional Colour including the scanner, drivers, Photodesk and SCSI cable is available now for £749 + £10 p&p + VAT (£891.82 inc). Photodesk is also available separately from Computer Concepts for £169 + VAT (£198.58 inc.).





he recent 'Worldwide Clip Art competition' has been an even greater success than the first competition we held last year. Loads of entries were submitted, causing the judging team many late nights.

The prize for the overall winner is a Risc PC donated by Archimedes World. After much consideration, this goes to D. Slaven for King Cup (bottom right).

Computer Concepts' staff voted for their favourite ArtWorks Entry. They chose 'Bourbon' (right) by Grant Naylor who wins a Pioneer DRM-602X CD ROM drive.

Runners Up Prizes for ArtWorks entries go to Trevor Shaw ('SnowScene').

Robert Merrifield ('Quay'), Hans Rijnen ('Cartoon', below), University of Warsaw ('LegoMen'), Dave Wilcox ('SpaceShips'), Alastair Brown ('ChromeLady'), Leonard Hickman ('HisnHers'), Henk Huinen ('IronHorse') and, for the second year running, Elaine Jones ('SnowQueen').

All receive any Computer Concepts software package of their choice, plus a year's subscription to Archi-

medes World magazine.





As well as the clipart, the CD also contains a large number of 24-bit sprites and TIFF images for use in art programs or desktop publishing.

Art for ArtWork's sake ...

Software Developers' Toolkit

One of the most important features of ArtWorks, which is often overlooked by the user, is its modular design. If you use ArtWorks, you may have noticed that when it loads, it

does so as a series of modules. These are the various tools available within ArtWorks that go to make up the Toolbox menu.

This approach means that it is relatively easy to add (and remove) features if necessary. If, for example, someone required a polygon generating tool, the appropriate modules and resources could be added simply

to the ArtWorks application.

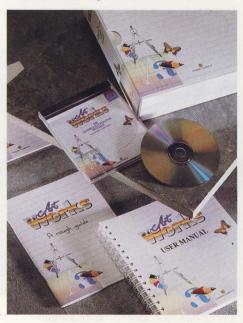
Computer Concepts are keen to see third-party developers producing their own tools for ArtWorks and have designed a special programmers' toolkit to facilitate this process. This consists of detailed information on the structure of ArtWorks modules, plus notes and actual code in order to design your own.

There are already a number of modules that have been produced by third parties, and these include a tool to allow input drawing via a graphics tablet, plus a module for 'magnetic objects' allowing items to be snapped to any shape.

ArtWorks v1.5 on CD

ArtWorks v1.5, the latest version of Computer Concepts' graphics illustration program, is now available on compact disc. Whereas the program formerly occupied 15 floppy discs, it now comes complete on a single CD.

Having everything on the one disc benefits the user greatly by simplifying the installation process as well as having all the outline fonts (220 in total) available at the same time. All fonts are supplied in both RISC OS 2 and RISC OS 3 format.



In addition, the CD version of Art-Works also contains the entire contents of the original ArtWorks Clip-Art CD 1, which would normally cost an additional £19 (£22.32 inc. VAT). ArtWorks CD costs £169 (£198.57 inc. VAT) which is the same as the floppy disc-based version.



I mpression Publisher Plus is the third new version of Impression to be released by Computer Concepts and represents many years of work, both in terms of development and programming.

It contains all the features necessary to produce full colour, professional documents via one of the easiest user interfaces available on any computer system.



Publisher Plus incorporates all the new features found in Publisher, such as irregular frames and 24-bit colour support, and adds important things like OPI and EPS support. If you are serious about your desktop publishing then Publisher Plus will be an essential tool.

New features

An enhanced word count option now provides information on the document, chapter and story.

When you have a selected region the swap case function now lets you capitalise the start of sentences, capitalise initial letters, change all text to upper case, change all text to lower case, or swap all letters.

Printing pages with crop marks is now made easier by being able to alter the page origin of the document. Fine adjustments can be made via the print dialogue box to centre pages precisely to ensure any printers marks are displayed correctly.

Publisher Plus

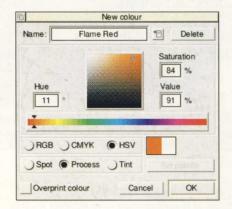
Professional Desktop Publishing for Acorn RISC Computers

Colour plays an important part in Publisher Plus and colour handling has been extended to provide precise control over any shades you might

use. Process, Spot and Tints are all supported, in much the same way as in ArtWorks. The three standard colour models are all supported namely RGB, CMYK and HSV (Hue, Saturation, Value).

You can assign names to colours. This lets you use the same colour in several places in your document. Editing a named colour changes all occurrences of that colour in the document – in the same way as editing a style changes all text in that style.

A new colour tool - included on the tool bar for instant access - provides you with a new colour picker, allowing you to create any shade (from a 24-bit palette) you may need.



The default colour list includes a wide range of colours and and you can add further shades using the colour picker. Furthermore, colour definitions can be imported from ArtWorks allowing you to match colours in Publisher Plus against any of those used in any imported Art-Works graphic.

OPI

OPI (**O**pen **P**re-Press **I**nterface) is a standard system used by typesetters to enable high quality images to be used in documents. To use OPI, simply take your images along to your typesetting bureau and they produce two scans; one low res and one high res. These files can be Apple Mac format (PICT) or PC format (TIFF) – Publisher Plus supports both formats.

The low res image is then dropped into your document and can be scaled and cropped like any other picture. When it comes to typesetting the page, the typesetting bureau substitutes the high res image for the low res one. The obvious advantage of this is that the low res image takes up little space and is therefore easier to work with. The finished result though, is of much higher quality.

EPS and DCS

Publisher Plus supports two new formats, common in the world of professional desktop publishing. EPS (or **E**ncapsulated **P**ost**S**cript) is a general purpose picture file format and is used on PCs and Apple Mac computers. This makes it easier to transfer images from other systems to the Acorn platform.

DCS (or **D**esktop **C**olour **S**eparation) is a variant of EPS and is used by applications to hold pre-separated data. Most colour printing systems work by printing the image using four different inks - Cyan, Magenta, Yellow and Black (also known as the Key) - and DCS splits image files into four similar parts.

Impression Publisher Plus is available now for £299 + VAT (£351.32 inc.) or as an upgrade for all registered owners of Impression Publisher for £130 + VAT (£152.75 inc.).

Il new releases from Computer Concepts since October last year have been designed to work with the new machines (although the Eagle card requires an upgrade) and in many cases take advantage of the new features.

In particular Impression Style and Publisher and ArtWorks version 1.5 all take advantage of the new facilities, such as 16 and 24-bit screen modes. Upgrades for all the following products, where required, are available now.

Printer spoolers

We have been preparing a release of our AUN printer Spooler software for some time, but each time we get close to release Acorn introduce new products or new versions of !Printers that affect our software (such as !Access, more recently !Printers version 1.22 and now the Risc PC).

Each of these has required additional work and changes, in some cases to work around bugs that exist in the Acorn releases. It would be pointless making piecemeal releases and so we have decided to delay the release of the product until it can be made compatible with all the above.

Computer Concepts and the Acorn Risc PC

We now hope to release AUN printer spoolers, that work with LaserDirect and TurboDrivers, before the end of October 1994. The new software should also be demonstrated at the Acorn World Show.

software on this card, but know that version 2.20 of CDFS and 1.10 of SCSIFS should work. Contact Acorn or your SCSI board manufacturer for more details.

Upgrades

We are only able to offer upgrades to registered customers (ie you should have returned your registration card). Please return your disc 1 and quote your serial number when wanting to upgrade and please make it absolutely clear which product and which version you are upgrading from, and that you require the upgrade for the new Acorn Risc PC.

*1 ScanLight note:

ScanLight Professional requires an Acorn compatible SCSI interface card. We are aware of compatibility problems with older versions of the the



*2 LaserDirect note:

Early versions of the LaserDirect 4 and 8 (pre-A5000 versions) may require an expansion board hardware upgrade.

Product

FaxPack

ColourCard

Impression II
Impression Junior
ArtWorks
Equasor
Compression
TurboDrivers
ScanLight (all versions)
AudioWorks
WordWorks
LaserDirect HiRes 4 & 8
LaserDirect Qume

ScanLight Video Software Eagle M2

Pioneer CD ROM drive MacFS Graphics Loaders

Compatibility status

Upgrade to Impression Publisher Upgrade to Impression Style Upgrade to version 1.5 Compatible Compatible Upgrade to version 4.0 Software upgrade to version 2.06 Compatible Compatible Software upgrade to version 2.63 Not compatible Not compatible Not compatible (not needed) Upgrade to version 2.06 ScanLight upgrade to version 2.06 TakeTwo upgrade and EPROM upgrade Compatible

Compatible

Compatible

Price to upgrade to new version

£49 + £3 p&p + VAT (£61.10 inc) £49 + £3 p&p + VAT (£61.10 inc)

£10.00 + VAT (£11.75 inc)

Latest version is 1.04. Upgrade £11.75 inc Latest version is 1.17. Upgrade £11.75 inc

£10.00 + VAT (£11.75 inc) £10.00 + VAT (£11.75 inc) *1

Latest version is 1.47. Upgrade £11.75 inc

£10.00 + VAT (£11.75 inc) *2

No upgrade possible

No upgrade possible

£10.00 + VAT (£11.75 inc) (NYA)

All 3 £17.00 + VAT (£19.97 inc) Latest version is 1.00 Latest version is 1.03 Latest Version is 1.00 Pormulix is a brand new RISC OS application designed to make creating formula or equations both quick and easy. It has been written to take advantage of the new features in RISC OS 3, and yet also works under RISC OS 2. It offers

 $\prod_{n=0}^{R} \frac{(1-q^{a_1+n})(1-q^{a_2+n})...(1-q^{a_M+n})}{(1-q^{b_1+n})(1-q^{b_2+n})...(1-q^{b_N+n})}$

powerful features such as OLE (Object Link Embedding) for full integration with other Computer Concepts packages such as Impression Style and Publisher.

Formula are created simply by typing them in. Formulix behaves in a way similar to a conventional word processor. Using Formulix's tools, you can then edit the formula until you are happy with the result and export it out for use in another application. With modern applications such as Impression, you can then use a OLE link to automatically load the formula back into Formulix for subsequent editing.

A calculated risc?

Formula editing made easy

A main part of the program is the now familiar toolbar along the top of the editing window that gives immediate access to all the most frequently used tools.

This is further enhanced by an information line. As well as providing help on the many powerful tools, it is continually updated to show the user where the caret is in the formula.



Formulas have a much more complex structure than a word processed document, and this information line is an invaluable aid for new and experienced users alike.

Formulix provides unlimited undo and redo, similar to that found in ArtWorks. You never need worry whether an operation might modify your formula beyond all recognition – if you make a mistake, just click on an icon, and try again.

A toolbox is displayed on screen giving instant access to commonly used mathematical structures (such as brackets,

matrices, integrals and sigmas) and user defined formula elements. Formulix also has a special 'free symbol' feature which allows the user to create their own dialogue box containing their most often used symbols selected from any RISC OS outline font.

Not only does Formulix have many options to control how a formula appears, but any operation can be assigned to a user defined key short cut you can customise Formulix to suit your own particular needs.

Many of the new features now familiar in Impression have been incorporated into Formulix to make it even easier to use. For example, drag

and drop is an integral part of the package, complementing the standard clipboard which facilitates transfer of elements between different formulae.

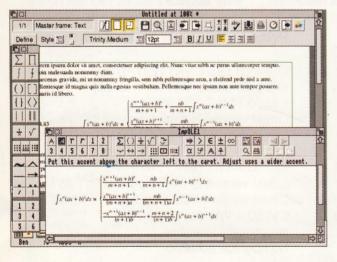
Even though Formulix is a completely new program, it can still load Equasor documents and then edit them with its superior formula creation tools.

Four new outline fonts (MathGreek, MathLogic1, MathScrip1 and MathBest) are supplied with the package. These provide over seven hundred mathematical symbols, from the most commonly used to the most esoteric.

$$v_i = |c| + \lfloor x \rceil + \prod_{i=1}^{a - \sin(k)} + x^{\|n\|} + \left(\frac{1}{x^2}\right)$$

The price for Formulix is only £69 + VAT (£81.07 inc.) which represents excellent value for money, given the power and versatility of the software. Registered owners of Equasor can upgrade for just £49 + VAT (£57.58 inc.), making Formulix even better value.

When used with Impression Style or Publisher, Formulix becomes one of the most powerful technical editing packages available on any computer system today. If you are a teacher, student or work in scientific publishing, you'll find Formulix an essential tool for your technical desktop publishing work.



Rather than just upgrading Equasor, Formulix is a completely new program. Much work has gone into the design of the application to make sure that it is easy and straightforward to use, and yet still provides all the powerful and versatile features needed to create complex equations.

Full-Motion Video hits the Risc PC

hen Acorn spun-off their new subsidiary company, Online Media, to develop a Set-Top Box (STB) in a joint venture with Cambridge Cable and Anglia TV, they invited Wild Vision to take part in the development of their video playback hardware.

As a result of this co-operation, CC will be launching two MPEG expansion cards based on the same technology. Both allow full-screen, full-motion, better-than-VHS-quality MPEG videos with CD-quality stereo soundtracks to be played from hard disc or fast network.



With the addition of a suitable CD-ROM drive, it will be possible to watch feature-length films and music videos. These are already available from high street shops in VideoCD format.



The boards integrate fully with Acorn's Replay system, allowing existing Replay-aware applications (Impression, Magpie, Genesis etc.) to display the superior picture quality MPEG movies.

New MPEG-enhanced versions of existing interactive packages, e.g. Anglia TV's *Castles, Understanding the Body* will become available dur-

ing the next few months, as well as new titles such as *Understanding Energy* and *The World's Weather*.

The first board has a Scart socket to connect to an RGB monitor capable of 50Hz PAL modes (e.g. Acorn AKF11, Eizo 9060, domestic TV with a Scart connector).

Desktop programs may be run on this display or on any monitor connected to the computer's normal monitor socket. The second board allows high-end multisync type monitors to display video-in-a-window as well as full-screen.

What is MPEG used for?

The release of an MPEG board for Philips CD-i players quickly established VideoCD as the new format for standard. As a result you'll find not only the latest movie releases available in the high street, but also an extensive back-catalogue of music videos. For much the same price as a CD, you can buy titles like Ghost, The Hunt For Red October, as well as material not available on VHS, such as Kate Bush's Whole Story '94.

Another important use for MPEG hardware on Acorn machines is for the playback of video sequences in educational software. There are already many CDs available for the Acorn platform that make use of Replay to show video clips, and many of these are being re-encoded with MPEG data. The open design of Replay means that it will automatically sense when an MPEG film is being used and uses the necessary hardware if fitted to play it back.

The standard version of the Movie Magic card is expected to be released at the Acorn World Show and retail at about £249+VAT while the multisync version is planned for later release and will cost some £100 more.

What is MPEG?

MPEG is a standard developed by the Motion Picture Experts Group, designed to compress full-size, full-motion, better-than-VHS-quality video and CD-quality audio, typically by a factor of 100:1.

Uncompressed video of VHS quality would demand data rates in the order of 10MBytes per second, so even if you could find a drive fast enough, one minute of video would fill an entire CD-ROM!

The MPEG algorithm uses a number of sophisticated techniques to dispose of redundant data - e.g. detecting parts of the picture that don't change in subsequent frames – allowing it to get away with only 150K/sec. The complexity of the system necessitates the use of dedicated hardware. Although realtime decompression is currently affordable, compression requires equipment costing tens of thousands, so don't expect to see digital recording on your desktop quite yet - you'll have to go to a bureau for that kind of service.

he teletext services provide a huge resource of free and upto-date information on everything from the weather to the current share prices. Now, using TV Tuner, not only can you view teletext pages but you can also capture the data they contain.

TV Tuner provides the very latest teletext hardware to all Acorn computers able to accept single width expansion cards. An externally boxed version that connects via the parallel port will be available later for A3000/A30x0/A4000 and A4 users.

Both versions of TV Tuner not only receive teletext but are also fitted with three external connectors to allow integration into the world of multimedia. For example, there is a 'walkman' style headphone socket so that you can listen to the TV and a BNC socket provides a composite colour video signal suitable for use with video digitisers or a suitable monitor. An ideal partner to your



Fine Tuning

TV Tuner is the Eagle M2 multimedia card to provide television in a window. This combination on a Risc PC verges on stunning!

Three fully multi-tasking software applications are supplied. *!TVTuner* is used to configure the system to your local TV stations. Tuning is automatic and up to eight channels are available. *!TVControl* provides a 'remote control' to allow you to change channels when using only a video digitising system. The main

application however is !TeleCFax which perhaps offers the most comprehensive features of any teletext application on the Acorn platform. Some of its features include:

- Page selection using a 'remote control' or by 'point and click'.
- Fastext and index page selection.
- Hold and reveal options.
- · Fifty page buffer.
- Export as sprites or text files.
- Impression styles and effects.
- Dedicated window for subtitles.
- Foreign language support.

A powerful feature of */TeleCFax* is its support for script files to allow you to control the system and to grab and/or save pages.

TV Tuner costs £89 + VAT & p&p (£111.62 inc.) for the basic tuner card and £159 + VAT & p&p (£193.87 inc.) for the tuner card with Teletext. Availability and prices for the externally boxed versions will be announced later.

In keeping with Computer Concepts' policy of constant product development, our range of TurboDrivers has just been increased to include a version for the Epson Stylus Colour printer.

The driver is fully optimised and supports printing resolutions up to Epson's maximum of 720dpi. Defini-

tions for both mono and colour printers are included with the software at the normal price of £49 + VAT.

TurboDriver version 4
now offers full compatibility with the Risc PC
and takes advantage of
the machine's new architecture to
provide features such as unlimited
printer buffer allocation.

Speed tests of TurboDriver software running on the Risc PC show a noticeable speed advantage over the standard Acorn drivers, with a typical

Quick on the draw

page of text being completed in half the time. This increases up to ten times faster for more complex page layouts.



Compatibility with Acorn's Access network software is ensured, as well as the latest version of !Printers (up to 1.24). A new colour correction system enables better control over grey component replacement and black generation on all versions of the software. This makes sure that

printer output is both clear and sharp, even on printers that mix inks to produce different colours and shades.

The spooler software allows users on a network to share the facilities of a common inkjet or LaserDirect printer, providing most of the features of normal TurboDrivers. The package is

> fully compatible with any AUN network (including Econet) and includes one printer cable, the spooler software and a network licence. The licence incidentally covers all machines on the network.

The network spooler versions of the TurboDrivers and LaserDirect software will be launched at the forthcoming Acorn World Show in October. The price for both pieces of software (including the site licence) will be £149 + VAT.

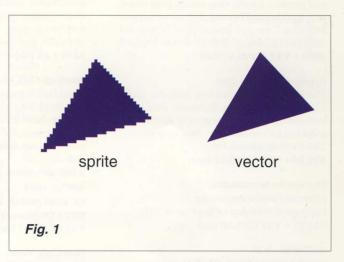
Behind the Mask

Creating cut-outs in ArtWorks

ith the arrival of Style, Publisher and ArtWorks 1.5, 24-bit colour is at last a reality. All three programs can now accept a host of different full-colour graphics formats making them ideal for professional work.

For those familiar with ArtWorks, you'll most probably be aware that it is a 'vector' graphics program. That is, pictures created with it are based on coordinates rather than pixels.

You could load an existing sprite into Paint and remove any background pixels by hand, although this would take some time and you'd still be left with a jagged edge around the car.



Alternatively, you could load the sprite into ArtWorks and then 'draw' over the background with a shape.

just overlapping) the sprite. Make sure that the rectangle's fill colour is set to 'None'.

This is how :-

Step 1

Run ArtWorks and first create a new layer. This will be used to hold the mask shape and make sure that the sprite doesn't get in the way when drawing. Load in your sprite and then switch to the new layer.



Now here comes the clever part. Select both the rectangle and the car shape and use 'Join shapes' (from the 'Lines/Shapes' menu) to merge them into one. Make the fill and line colours both white and hey presto, you have a mask - Figure 3.

Step 6

If you still have any of the background showing through, or you've managed to obscure some part of the car, you can always edit the mask in the usual way until you are happy with the result.

In future issues of Archimedean, we'll take a look at further uses for masking, including non-rectangular 'frames' for graphics and text, as well as wrap-around text.

Fig. 2

ArtWorks can of course utilise sprites and other pixel images and we shall come to this later on.

Because it is vector based, the output from ArtWorks can be of a virtually unlimited quality. If a high-quality output device is used such as a laser printer or imagesetter, all lines and curves appear smooth. Printing sprites however, usually produces jagged edges because they are pixel based. Figure 1 shows the difference between a sprite and an ArtWorks file when enlarged.

ArtWorks allows sprites and vectors to be mixed in the same document. It is also possible to overlay one on the other or vice versa and it is this feature that is used to create masks. Imagine, for example, that you want to have a picture of a car on a white background.

Step 2

Trace around the edge of the car (remember you can zoom in using the magnify tool if required) using either the line tool or freehand line tool - Figure 2. It doesn't matter if you aren't too accurate as you can always edit lines later on.

Step 3

Once you have a line right around the car, join the two ends of the line to create a shape. This should just cover the car. Now make the fill colour of the shape 'None' (ie. invisible).

Step 4

Using the rectangle tool, draw a box completely covering (and



Fig. 3

PRODUCTS

Impression Publisher - 4.01

The latest and greatest addition to the DTP/WP range. Everything in Style, plus irregular shaped graphics frames, crop marks, page bleed, auto tracking and kerning, full colour support including Postscript separation of 24 bpp and 32bit CMYK images. 2Mb RAM min. required.

£169 + VAT (£198.57 inc)

Impression Style - 3.04

The ultimate word processor. Includes: spelling checker, thesaurus, dictionary, mail-merge, auto-paragraph numbering, style sheets, graphics. Full on-line help. Fast, easy to use. 2Mb RAM recommended.

£99.00 + VAT (£116.32 inc)

Impression borders disc

100 frame border designs for Impression Publisher or Impression Style.

£12.77 + VAT (£15.00 inc)

ArtWorks - 1.55

The most powerful and flexible graphics illustration program for the Archimedes, Package includes 220 outline fonts. 2Mb RAM minimum recommended.

£169 + VAT (£198.57 inc)

Clip-Art CD No 1

CD with over 700 ArtWorks drawings, over 100 24-bit full colour photographs, and a demo version of AudioWorks and sounds.

£19 + VAT (£22.32 inc)

AudioWorks - 1.48

A general purpose audio sample editing application. Works with a variety of file formats.

£49 + VAT (£57.57 inc)

WordWorks - 1.05

The ultimate combined English thesaurus and dictionary, with definitions. Hard disc recommended.

£39 + VAT (£45.82 inc)

TurboDrivers

- 2.10 (RISC OS 2) - 4.00 (RISC OS 3)

The fastest printer driver available for the Archimedes. Suitable for all current mono and colour Canon and Hewlett Packard inkjet printers (and laser printers) and Epson Stylus. Includes printer cable. 4Mb rec. for colour.

£49 + VAT (£57.57 inc)

MacFS - 1.03

A utility to read and write to Apple Mac Super-Drive floppies, hard discs, SyQuests/optical drives.

£99 + VAT (£116.32 inc)

Graphics Loaders

Allows you to load JPEG compressed files and PhotoCD images into Impression Style, Publisher and ArtWorks 1.5. Includes sample JPEG images.

£39.00 + VAT (£45.82 inc)

Compression - 1.17

Very fast automatic general purpose file compressing and decompressing utility.

£39 + VAT (£45.82 inc)

ColourCard Gold - 1.31 (series 1) - 2.31 (series 2)

Graphics accelerator expansion card. Provides much higher resolution, more colours, less flicker (higher refresh rates) and faster graphics drawing. 32,000 colour screen modes and video pass-through for Acorn modes.

£249 + £6 p&p + VAT (£299.62 inc)

ScanLight 256 - 2.06

Hand-held scanner capable of scanning 256 grey-levels for photographic quality image capture. Includes internal expansion card.

Versions available for all Acorn computers - so please specify model of computer when ordering.

A300/400/5000: £159 + VAT (£186.82 inc) A30X0/4000

CC mini podule £169 +VAT (£198.57 inc) HCCS Ultimate MicroPodule £229.00 + VAT (£269.07 inc)

ScanLight Video - 2.06

A combination of 256 greyscale scanner and 256 greyscale video digitising capability on a single card.

£220 + VAT (£258.50 inc)

ScanLight Professional - 2.06

Flatbed A4 256 grey-level scanner. Requires SCSI interface card (available separately).

£595 + £10 p&p + VAT (£710.87 inc)

LaserDirect HiRes8 - 2.10 (RISC OS 2) - 2.63 (RISC OS 3)

Direct drive, 8 page per minute, 600 dpi, laser printer. 2Mb RAM minimum, 4Mb RAM recommended.

£1099 + £10 p&p + VAT (£1303.07 inc)

LaserDirect HiRes4 - 2.10 (RISC OS 2) - 2.63 (RISC OS 3)

Package includes 4 page per minute, 600 dpi laser printer with interface board and software. (Note: For existing owners of a standard Canon LBP-4 Plus printer the Interface board and software are available separately.)

£799 + £10 p&p +VAT (£950.57 inc)

Canon BJC-600 colour printer

Low cost A4 colour printer designed specifically to get the best possible results on plain paper. 360dpi, separate CMYK inks. Includes RISC OS 3 TurboDrivers.

£389 + £10 p&p + VAT (£468.83 inc)

Canon BJ-200 mono printer

Fast, 360 dpi, inkjet printer. Printer has built-in sheet feeder and power-supply. Includes printer cable and TurboDriver software.

£229.00 + £10 p&p + VAT (£280.82 inc)

Canon BJ-230 mono printer

Same as above except takes A3 paper. £289.00 + £10 p&p + VAT (£351.32 inc)

Pioneer PDRM-604X quad-speed multi-disc CD ROM drive

Fully PhotoCD compatible. Includes driver software for all Acorn compatible SCSI interface cards, compatible with AUN networks. Requires separate SCSI card.

£999 + £10 p&p + VAT (£1185.57 inc)

Eagle M2 - 1.02 (TakeTwo)

Single width expansion card digitises still images and Replay movies, audio sampling and playback and midi capability. Includes the Eidos real-time video compression software (and AudioWorks & ScanLight):

£329.00 + £6 p&p + VAT (£393.62 inc)

Midi Max

An Acorn compatible midi expansion card with support software. On board buffering. £69.00 + £6 p&p + VAT (£88.12 inc)

New Products

TV Tuner

A TV tuner and teletext input card. Teletext can be viewed directly and when used with a suitable digitiser, such as the Eagle card, TV can be viewed on screen in a window.

£159 with Teletext software + £6 p&p + VAT (£193.87 inc) £89 without Teletext software + £6 p&p + VAT (£111.62)

Formulix

A new and advanced mathematical formula and equation editor.

£69.00 + VAT (£81.07 inc) £49.00 + VAT (£57.58 inc) for Equasor owners

TurboDriver & LaserDirect spoolers

A network spooler for the TurboDrivers and LaserDirect.

£149.00 + VAT (£175.07 inc) including a TurboDriver or LaserDirect site licence

Clip-Art CD 2

Contains 1994 ArtWorks competition entries and a collection of quality photo images. £19.00 + VAT (£22.32 inc)

Movie Magic

Plays full screen, full motion MPEG video from sources such as VideoCD. Drives an external RGB monitor or TV.

£249 + £6 p&p + VAT (£299.62 inc)

Publisher Plus

A version of Impression Publisher for professional users, includes for example OPI and EPS support, spot colour and named colours.

£130.00 + VAT (£152.75 inc) as an upgrade for Publisher owners £299.00 + VAT (£351.32 inc) for a full copy of Impression Publisher Plus

Font Packs

AvantG, BookM and an original new quality typeface called Obscura.

£20.00 + VAT (£23.50 inc) for each font.

ScanLight Professional Colour & Photodesk

An A4 flatbed, 800dpi, 24 bit colour scanner from Canon. Compact and fast. The package includes Spacetech's Photodesk, and drivers. £749.00 + £10 p&p + VAT (£891.82 inc)

£749.00 + £10 p&p + VAT (£891.82 inc) ScanLight package including Photodesk

Photodesk

Professional 24 bit colour photo-retouching package from Spacetech.

£169.00 + VAT (£198.58 inc)